

ABSTRACT OF THE DISCLOSURE

A programmable thermostat system for controlling space conditioning equipment includes: a transparent touch pad juxtaposed over a liquid crystal display to constitute a touch screen for interactive interface with a user; a temperature sensor; and a processor including: a CPU; a real time clock; and a memory for storing program and data information. A program stored in the memory directs the CPU to: A) selectively establish, on the liquid crystal display, a menu including a representation of a button at a predetermined XY position; B) read the position on the touch pad juxtaposed with the first predetermined position to determine if the button has been touched; and C) if the button has been touched, change to a different menu or establish a condition incorporated into the thermostat system operation. Preferably, an alphanumeric message explaining the function of the button is also displayed. Different menus can place the buttons and messages in various positions on the touch screen to facilitate intuitive programming of the thermostat system.